WHAT IS CLAIMED IS:

1. A method of implementing cable modem functions on a host computer comprising:

receiving information which may include cable modem data and cable modem commands at the cable modem;

transferring at least a portion of the information to the host computer;

performing functions corresponding to any transferred cable modem commands on the host computer into first results;

processing any transferred cable modem data on the host computer into second results;

translating the first results into hardware specific functions;

translating the second results into hardware specific data formats;

executing the hardware specific functions; and

transferring the hardware specific data.

2. The method of Claim 1, wherein the host computer includes a cable modem abstraction layer.

3. The method of Claim 2, wherein the translating is performed in by the abstraction layer.

4. The method of Claim 2, wherein the abstraction layer is a DOCSIS abstraction layer.

5. The method of Claim 1, wherein the cable modem functions are performed in a firmware emulator.

6. The method of Claim 1, wherein the modem functions performed on the host computer may be hardware independent.

7. A modem function processor comprising:

an abstraction layer which translates modem functions to and from hardware-specific functions; and

a firmware emulator which performs hardware independent functions.

8. The modem function processor Claim 7, wherein the abstraction layer sends or receives modem commands and/or data to or from a cable modem.

9. The modem function processor Claim 7, wherein the abstraction layer is a DOCSIS abstraction layer.

10. The modem function processor Claim 7, wherein the firmware emulator includes a plurality of state machines and states within the state machines.

11. The modem function processor Claim 10, wherein the plurality of state machines performs the cable modem functions.

12. The modem function processor Claim 7, further comprising an interface to a cable modem.

13. The modem function processor Claim 12, wherein the interface may include one or more intermediate software driver interface layers, such as a transport driver interface.

14. The modem function processor Claim 12, wherein the interface is a direct interface.

15. A method of performing modem functions comprising:

receiving the modem commands and/or data; and

distributing the modem commands and/or data among state machine functions; and

processing the state machine functions on a host computer.

16. The method of Claim 15, wherein the conversion is performed by an abstraction layer which converts between hardware specific functions and hardware independent functions.

17. The method of Claim 15, wherein the modem functions are cable modem functions.

18. The method of Claim 15, wherein the processing uses resources of the host computer.